## Pacific Island Network — Featured Resource



## The Sea Turtle - Honu, Laggan, or Laumei

**Description:** Sea turtles are air-breathing reptiles,

well-adapted to a warm ocean water existence. They have a streamlined body that moves easily in the water, propelled by strong front flippers with back flippers acting as rudders. There are seven species of sea turtles worldwide. The two species most commonly found foraging or nesting in or near most Pacific Island Network parks are green turtles (Chelonia mydas) and hawksbill turtles (Eretmochelys imbricata). Each species has distinct features and habitats. The adult green sea turtle (the larger of the two species) weighs 300-400 pounds and has a carapace (a protective shell formed by bony plates) length of 3.5-4 feet with varying shades of black, gray, green, brown, and yellow. This species is primarily vegetarian and eats sea grass and algae. Its habitat is shallow coastal waters, bays, and protected shores. The hawksbill turtle is significantly smaller and weighs 100-150 pounds, with a carapace length of 2.5-3 feet with brown, orange, or yellow coloration. It feeds primarily on marine invertebrates (sponges, anemones, squid, shrimp) and can be found near coastal reefs, rocky areas, estuaries and lagoons. Both species have strong site fidelity. After mating at sea they return to the same stretch of sandy beach to lay eggs. After about 2 months, hatchlings crawl together towards the sea.

Cultural Significance: Sea turtles have important roles in the environment and culture of the Pacific Islands. They are featured in mythology, petroglyphs, and as 'aumakua (personal family guardians). Today, their significance is enduring world-wide. The year 2006 was designated "Year of the Turtle" to raise awareness about the role and importance of marine turtles, see: http://www.ioseaturtles.org/yot2006/bg\_information.php.

Inventories and Monitoring: The National Park of American Samoa does not officially conduct sea turtle inventories. However, they assist by reporting any turtle sightings to the Department of Marine and Wildlife (DMWR). Since the 1990's satellite tagging has been used to monitor migrating sea turtles in

the Pacific West Region. Kalaupapa NHP has recorded satellite tracking of hawksbills nesting on Maui and traveling to foraging grounds near Molaka'i. Sea turtles within Pu'uhonua o Hōnaunau NHP are routinely tagged and monitored by National Oceanic & Atmosperic Administration (NOAA), and monitoring of green sea turtles has been conducted by staff at Kaloko-Honokōhau NHP (KAHO) and t



**Top and top left:** *Green* sea turle at Pu'ukoholā Heiau National Historic Site.



National Marine Fisheries Service (NMFS). NMFS is additionally supporting turtle nesting beach monitoring on Saipan, Guam, and American Samoa. Additionally, DMWR has been conducting tagging studies in AS. For the American Samoa "Year of the Sea Turtle" campaign, a nesting hawksbill was tagged and monitored. Hawksbill turtles are also monitored at Hawai'i Volcanoes NP.

**Data:** A seaturtle database is used to record data collected at KAHO. Another database, the Turtle Research Database System (TREDS), developed through a collaborative effort by

the Secretariat of the Pacific Regional Environment Programme, Western Pacific Regional Fishery Management Council, Secretariat of the Pacific Community, NOAA Fisheries, Queensland Government Environmental Protection Agency, South-East Asia Fisheries Development Centre, and the Marine Research Foundation is currently in trial studies within American Samoa and other Pacific Islands. The database is designed to consolidate data regarding tag deployment, nesting beach/foraging ground monitoring, and hatchlings.

Threats: All species of turtles are threatened with extinction. Some common threats include *fibropapilloma* tumors, poaching, nesting threats such as habitat loss, and marine environment threats such as entanglement from marine debris and fishing gear. Loss of nesting habitat is a world-wide problem since sea turtles will return to the same beach year after year. *Fibropapilloma* disease is caused by a virus that produces fibrous growths on the eyes, mouths, necks, and flippers.

Conservation and Management: Green sea turtles are currently listed within the Pacific Region as "threatened" and the hawksbill as "endangered" under the U.S. Endangered Species Act of 1973. Sea turtles are protected under federal and state/territorial laws in the Pacific Island Network. Studies indicate that the overall Pacific sea turtle population is declining. Sea turtle conservation is critical in order to prevent decreasing populations. Promoting public awareness regarding protecting them and the importance of preserving their habitat will provide safe havens for nesting and food sources. Sea turtles evolved approximately 180 million years ago and are an important aspect of a healthy marine ecosystem. Let's hope they survive another 180 million years.

## For more information:

http://www.nmfs.noaa.gov/pr/species/turtles/ http://www.pifsc.noaa.gov/psd/mtrp/ http://www.fws.gov/pacificislands/wesa/endspindex.html#Pacific

http://www.pifsc.noaa.gov/library/greenseaturtle.php

http://www.turtles.org/overview.htm http://www.ioseaturtles.org/yot2006/factsheet.php